

## REMARKS

This is in response to the non-compliant amendment rejection. A few typographical errors are also corrected.

Applicant's Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite because the last phrase recites "using a base value and a gradient in both x and y directories" Applicant corrected Claim 5 as intended to say "in both x and y directions."

Claims 1,2 and 4 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Harkin et al. (U.S. Patent no. 5,999,200; hereinafter Harkin) in view of White , et al. (U.S. Patent no. 5,918,225; hereinafter White).

Applicant's claim 1 calls for" determining maximum and minimum values of index of normal table area of a lookup table, and expanding the lookup table opcodes above and below said maximum and minimum values of said index."

This is not taught in these references. The examiner acknowledges that Harkin does not disclose the step of determining the maximum and minimum values of index, and expanding the look up table opcodes. The examiner states that White teaches this at lines 51-52. Applicant's have examined the White reference and have not determined where this is shown on any lines 51-52. Applicant is not sure on what column of the 56 column this may be found. The applicant did find on column 51 a reference to expanding a lookup table so that it can store more than 256 entries. It simply increases the number of entries. It does not teach expanding the lookup table opcodes above and below said maximum and minimum values of the index of normal table area. In the abstract of the reference it discusses additional unique values are inserted into the column of the user's

table. It says nothing about opcodes or expanding above or below the maximum and minimum values of a normal table. White is a SQL-Based database and teaches nothing about enhancing the rendering of pixels in the case of opcode. For these reasons it is not seen where applicant's claimed invention would be obvious in view of these references.

Applicant's claims 2-4 dependent on claim 1 are deemed allowable for at least the same reasons as claim 1. Further claim 2 calls for the expanding step to include the step of replicating the highest value in the index is above the normal table area. This is neither taught nor suggested in either reference. There is no teaching in either reference as to the values of the index and more specifically that the values above the maximum limit be a replication of the highest value. The examiner suggests that this is inherent. There is no reason for it to be inherent for there is no suggestion of a value outside of the normal range. The only teaching the examiner is relying on is the applicant's own teaching and that is proscribed hindsight reasoning. To suggest it is inherent since it is the closest to the actual index implemented in the normal range is not based on the reference but again is based on hindsight reasoning of applicant's teaching. There is nothing in the reference to suggest values outside the normal range. The examiner's argument is based on applicant's teachings and not those of the references.

Claim 3 further calls for "said opcodes are for shading."

Claim 4 further calls for the expanding step to include the step of replicating the lowest value if the index is below the normal table area. This is not suggested in either reference. There is no suggestion in the references of adding values if the index is below the normal table area or what these values would be. Only applicant teaches this.

Claims 5-6 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Lung, et al (U.S. Patent No. 5,533,174; hereinafter Lung).

Lung describes a low cost page printer. As admitted by the examiner Lung does not disclose means for rendering to include a lookup table that includes opcode values over all of indexes wherein the index into the lookup table is calculated for every pixel using a base value and a gradient in both x and y directions. The examiner references Harkin to teach this but this is not taught in Harkin.

Applicant's claim 5 calls for "a printing device;  
a printer controller for controlling said printing device, said printer controller including means for interpreting responsive to each line of source language to translate into machine language and then execute and wherein a figure to be printed is divided into graphics rendering primitives and means for rendering where each and every pixel in the primitive is a function of its position in the primitive, said means for rendering includes a lookup table that includes opcode values over all values of indexes wherein the index into the lookup table is calculated for every pixel using a base value and a gradient in both x and y directions and said means for providing opcode values for all values of indexes includes determining maximum and minimum values of index of normal table area of a lookup table, and expanding the lookup table above and below said maximum and minimum values of said index by replicating the highest value if the index is above the normal table value and replicating the lowest value if the index is below the normal table area."

As discussed previously this is neither taught nor suggested in the Harkin or White references and is not taught in Lung. There is no provision for providing for all values of indexes, there is no teaching of determining maximum and minimum values of the index and no teaching of replicating the highest value if the index is above the maximum value and replicating the lowest value if the index is below the minimum value. As stated in the background of the patent application the prior art had delays in the time for rendering pixels occur because of the time taken to access outside the lookup table area. Claim 5 is therefore deemed allowable over these references.

Claim 6, as amended) calls for: "a lookup table for the entire range of index values; said lookup table of said rendering subsystem has its highest and lowest values replicated above and below the normal table indexes so as to provide lookup table values for the entire range of indexes." As discussed previously this is not taught or suggested in the references.

Since there is no other reason for rejection applicant's Claims 1-6 are deemed allowable and an early notice of allowance is deemed in order and is respectfully requested.

Respectfully requested;

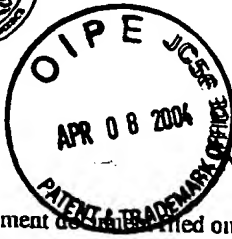
*Robert L. Troike*  
Robert L. Troike (Reg. 24183)

Telephone No.(301) 259-2089



## UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
P.O. Box 1450  
ALEXANDRIA, VA 22313-1450  
www.uspto.gov



Paper No.

## Notice of Non-Compliant Amendment (37 CFR 1.121)

The amendment to 3-22-04 is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121, as amended on June 30, 2003 (see 68 Fed. Reg. 38611, Jun. 30, 2003). In order for the amendment document to be compliant, correction of the following item(s) is required. Only the corrected section of the non-compliant amendment document must be resubmitted (in its entirety), e.g., the entire "Amendments to the claims" section of applicant's amendment document must be re-submitted. 37 CFR 1.121(h).

## THE FOLLOWING CHECKED (X) ITEM(S) CAUSE THE AMENDMENT DOCUMENT TO BE NON-COMPLIANT:

- ☐ 1. Amendments to the specification:
- ☐ A. Amended paragraph(s) do not include markings.
  - ☐ B. New paragraph(s) should not be underlined.
  - ☐ C. Other \_\_\_\_\_

- ☐ 2. Abstract:
- ☐ A. Not presented on a separate sheet. 37 CFR 1.72.
  - ☐ B. Other \_\_\_\_\_

- ☐ 3. Amendments to the drawings: \_\_\_\_\_

- ☒ 4. Amendments to the claims:

- ☐ A. A complete listing of all of the claims is not present.
- ☐ B. The listing of claims does not include the text of all claims (including withdrawn claims)
- ☐ C. Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim cannot be identified.
- ☒ D. The claims of this amendment paper have not been presented in ascending numerical order.
- ☒ E. Other: claim 2 has an incorrect status identifier.

For further explanation of the amendment format required by 37 CFR 1.121, see MPEP Sec. 714 and the USPTO website at <http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/officetlver.pdf>.

If the non-compliant amendment is a **PRELIMINARY AMENDMENT**, applicant is given **ONE MONTH** from the mail date of this letter to supply the corrected section which complies with 37 CFR 1.121. Failure to comply with 37 CFR 1.121 will result in non-entry of the preliminary amendment and examination on the merits will commence without consideration of the proposed changes in the preliminary amendment(s). This notice is not an action under 35 U.S.C. 132, and this **ONE MONTH** time limit is not extendable.

If the non-compliant amendment is a reply to a **NON-FINAL OFFICE ACTION** (including a submission for an RCE), and since the amendment appears to be a *bona fide* attempt to be a reply (37 CFR 1.135(c)), applicant is given a **TIME PERIOD** of **ONE MONTH** from the mailing of this notice within which to re-submit the corrected section which complies with 37 CFR 1.121 in order to avoid abandonment. **EXTENSIONS OF THIS TIME PERIOD ARE AVAILABLE UNDER 37 CFR 1.136(a).**

If the amendment is a reply to a **FINAL REJECTION**, this form may be an attachment to an Advisory Action. The period for response to a final rejection continues to run from the date set in the final rejection, and is not affected by the non-compliant status of the amendment.

Danny Chan  
Legal Instruments Examiner (LIE)

703-305-8239  
Telephone No.